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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/751,729

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EXAMINER

ALUNKAL, THOMAS D

ART UNIT

PAPER NUMBER

2627

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/12/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/751,729

Applicant(s)

HWANG ET AL.

Examiner

Thomas D. Alunkal

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 January 2007.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26 is/are pending in the application.
- 4a) Of the above claim(s) 18 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-17 and 19-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

Applicant's election with traverse of claims 1-17 and 19-26 in the reply filed on 1/26/07 is acknowledged. The traversal is on the ground(s) that the application contains a reasonable number of species and the examiner is not unduly burdened in terms of search. This is not found persuasive because as cited in the Requirement for Election/Restriction, Figures 10, 11, 15, and 16 clearly illustrate independent and distinct species. Furthermore, each of the species specifies various unique steps for defect management which would result in an independent search for each species. This would result in an unduly burden on the examiner (Also, see 37 CFR 1.141-1.142).

Claim 18 is withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the election requirement in the reply filed on 1/26/07.

The requirement is still deemed proper and is therefore made FINAL.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-17 and 19-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Park et al (hereafter Park)(US 7,188,271).

Applicant cannot rely upon the foreign priority papers to overcome this rejection because a translation of said papers has not been made of record in accordance with 37 CFR 1.55. See MPEP § 201.15.

Regarding claim 1, Park discloses a write once disc (see Title) comprising at least one record layer on which data is recorded (Column 2, lines 39-41), a temporary defect management area having a first temporary defect information regarding only a defect in the recorded data detected during a corresponding first recording operation other than a prior recording operation and first temporary defect management information for managing the first temporary defect information (Figure 3, TDMA1 (consisting of both TDFL and TDDS) and Column 6, lines 12-33), and at least one defect management area in which the temporary defect information and temporary defect management information recorded in the temporary defect management area are recorded as defect information and defect management information, respectively (Column 6, lines 6-11), wherein the defect information and defect management information and/or the temporary defect information and temporary defect management information are used by a recording and or reproducing apparatus to perform defect management with respect to the data recorded on the at least one record layer (Column 2, line 66 – Column 3, line 13).

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Regarding claim 2, Park discloses wherein the at least one defect management area comprises at least two defect management areas (Figure 7. Note, DMA consists of both DDS and DFL areas).

Regarding claim 3, Park discloses wherein the temporary defect information and temporary defect management information are recorded as a pair of information adjacent to each other in the temporary defect management area (Column 6, lines 12-33).

Regarding claim 4, Park discloses wherein the temporary defect information and temporary defect management information are recorded several times (Column 6, lines 60-63), and the temporary defect management information includes information regarding a location of corresponding temporary defect information (Column 6, lines 34-39).

Regarding claim 5, Park discloses wherein the temporary defect management information includes information regarding a location of previous temporary defect information recorded in the prior recording operation before the first temporary defect information (Column 6, lines 34-39).

Regarding claim 6, Park discloses a replacement area in which a replacement is recorded to replace the defect in the recorded data (Figure 3, inner spare area and outer spare area), wherein the temporary defect information includes a pointer pointing to a location of the defect and a pointer pointing to a location of the replacement for the defect (Column 6, lines 16-18).

Regarding claim 7, Park discloses wherein the temporary defect information further includes state information specifying and distinguishing between whether the defect occurs in one of a continuous defect blocks and a single defect block (Figure 3, SBM and Column 8, lines 4-22).

Regarding claim 8, Park discloses wherein the state information specifies that the defect occurs in the continuous defect blocks and that the pointer for the defect and the pointer for the replacement indicate starting positions of the defect and the replacement, respectively (Column 6, lines 16-18).

Regarding claim 9, Park discloses wherein the state information specifies that the defect occurs in the continuous defect block and that the pointer for the defect and the pointer for the replacement indicate end positions of the defect and the replacement, respectively (Figure 3, SBM and Column 6, lines 16-18).

Regarding claim 10, Park discloses a method of managing disc defects (Column 2, lines 52-65), comprising recording only information regarding a defect detected in data of a disc during a recording operation having an index of  $I$ , where  $I$  is an integer, as  $i$ th temporary defect information in a temporary defect management area of the disc (Column 6, lines 12-33), recording management information for managing the  $i$ th temporary defect information as  $i$ th temporary defect management information in the temporary defect management area (Column 6, lines 12-33), repeating the recording temporary defect information and the recording the temporary defect management information at least once while increasing the index  $I$  given to the recording operation (Column 6, lines 60-63), the temporary defect information and the temporary defect

management information by 1 so as to record temporary defect information and temporary defect management information having only defect information for the corresponding one of the recording operations, and reading and writing all of the recorded temporary defect management information and temporary defect information in a defect management area of the disc (Column 6, lines 6-11).

Regarding claim 11, Park discloses wherein the reading and writing is performed after recording of data in the data area according to a last recording operation (Column 6, line 63 – Column 7, line 5).

Regarding claim 12, Park discloses wherein the recording the temporary defect information and the recording the temporary defect management information comprises sequentially recording the temporary defect information and the temporary defect management information as a pair of information adjacent to each other, starting from an end of the temporary defect management area (Figure 3, TDDS and TDFL and Column 6, lines 12-33).

Regarding claim 13, Park discloses wherein the recording the temporary defect information and the recording the temporary defect management information comprises recording the temporary defect information and the temporary defect management information several times (Column 6, lines 60-63).

Regarding claim 14, Park discloses wherein the recording the temporary defect management information comprises recording information regarding a location of the temporary defect information corresponding to the temporary defect management information, and information regarding a location of temporary defect information

recorded during another recording operation having the index of at least i-1 (Column 6, lines 12-33).

Regarding claim 15, Park discloses wherein the recording the temporary defect information and the recording the temporary defect management information comprises recording the temporary defect information and the temporary defect management information sequentially as a pair of information adjacent to each other, starting from an end of the temporary defect management area (Figure 3, Element TDMA2 and Column 6, lines 12-33).

Regarding claim 16, Park discloses wherein the recording the temporary defect information and the recording the temporary defect management information comprises recording the temporary defect information and the temporary defect management information several times (Column 6, lines 60-63).

Regarding claim 17, Park discloses wherein the recording the temporary defect management information comprises recording information regarding a location of the temporary defect information corresponding to the temporary defect management information, and information regarding a location of temporary defect information recorded during another recording operation having the index of at least i-1 (Column 6, lines 12-33).

Apparatus claims 19-21 are drawn to the apparatus corresponding to the method of using same as claimed in claims 1-9. Therefore apparatus claims 19-21 correspond to method claims 1-9, and are rejected for the same reasons of anticipation as used above.

Apparatus claims 22-26 are drawn to the apparatus corresponding to the method of using same as claimed in claims 10-17. Therefore apparatus claims 22-26 correspond to method claims 10-17, and are rejected for the same reasons of anticipation as used above.

### ***Conclusion***

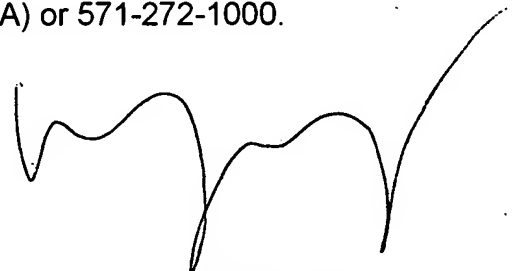
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ito et al (US 6,160,778) disclose an information recording medium containing defect management information. Kim et al (US 6,564,345) disclose a method for creating defect management information in a recording medium. Takashahi (US PgPub 2002/0136537) discloses an information recording medium capable of defect management. Ohata et al (US 6,469,978) disclose a rewritable optical disk with a spare area and an optical disk processing apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas D. Alunkal whose telephone number is (571)270-1127. The examiner can normally be reached on M-F 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571)272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thomas Alunkal



WAYNE YOUNG  
SUPERVISORY PATENT EXAMINER